



## Friends of Scotchmans Creek and Valley Reserve Inc



Inc No A0037872K

### Waterwatch Report 24 June 2018

#### Scope

- Basic chemistry tests at all sites.
- Dissolved Oxygen and Phosphate tests at sites 1a, 1b.
- Ammonium tests at all sites.
- Flow measurement and/or observations at all sites.
- Habitat Assessment at Sites 1a and 1b

#### Weather Conditions

During testing: Overcast

Previous 24 hours: Overcast, 2 mm rainfall.

Previous week: Cloudy, 15 mm rainfall.

#### Water Quality Results

	<b>YSC010 Site 1A Fiander arm</b>	<b>YSC012 Site 1B Crosby arm</b>	<b>YSC020 Site 2 Regent St</b>	<b>YVA100 Site 3 Valley Creek</b>
Air Temp C	10	10	10	10
Water Temp C	10	10	10	9
pH	6.9 E	6.8 E	6.7 E	6.8 E
Oxygen Conc. mg/l	8.4 E	8.6 E		
Conductivity E.C.	300 F	250 F	340 F	260 F
Turbidity F.T.U	28 P	18 F	40 D	12 E
Phosphorus, soluble ppm	0.049 F	0.098 P		
Ammonium NH <sub>4</sub> <sup>+</sup> ppm	0.08 G	0.13 F	0.30 P	0.00 E
Stream Flow (volume) l/s	14.8	7.4	14.7	1.3

(E = Excellent, G = Good, F = Fair, P = Poor, D = Degraded)

**Comments:**

- We conduct habitat assessments in the winter months, and defer waterbug sampling until the spring. Photographs illustrating the habitat typical of sites 1a and 1b are appended below.
- The habitat assessment at site 1a (Fiander arm) shows a worrying trend of sand and gravel deposition along the banks, due to upstream erosion, and surface transport of loose material from tracks and paths adjacent to the creek. This has caused degradation of the local indigenous vegetation. The overall habitat assessment reflected this.
- The habitat assessment of site 1b shows a gradually maturing native vegetation and some recovery of in-stream cover and vegetation.
- Turbidity at the downstream (Regent Street) site 2 was high – the water was visibly cloudy. Cause is unknown, but the high turbidity was not present at the upstream sites.
- Valley Creek (site 3) was very clear.
- Dissolved oxygen and pH readings were excellent but conductivity and phosphorus readings were fair to poor.

TW SW 26/6/18



Scotchmans Creek Site 1a Upstream 180624 P1000467



Scotchmans Creek Site 1a Instream 180624 P1000468



Scotchmans Creek Site 1b Upstream 180624 P1000463



Scotchmans Creek Site 1b Instream 180624 P1000465



Scotchmans Creek Site 1a Downstream 180624 P1000466



Scotchmans Creek Site 1b Downstream 180624 P1000464